

**WVDP Project Operating Plan:
Accelerate cleanup of surplus nuclear facilities**

BACKGROUND

Recovery Act Project:	West Valley Demonstration Plant - Accelerate cleanup of surplus nuclear facilities
TAFS:	89-09/10-0335
Project Identification Code:	2002180
Recovery Act Bill Reference:	Title IV Energy and Water Development, Non-Defense Environmental Cleanup (H.R.1-25)
Project Cost:	\$62,875,000
Budget Authority:	05949, FE.01.14.00.0
Program Office:	Environmental Management (EM)
Recovery Program Plan:	EM – Non-Defense
Management Office:	John Moon, Acting Manager, Office of Small Sites Project, John.Moon@em.doe.gov , 202-586-3080
	Bryan Bower, Federal Project Director, West Valley Demonstration Project, bryan.bower@wv.doe.gov , 716-942-4368

LEADS

Implementation:	N/A
Breakthrough:	N/A
Laboratory:	N/A

I. SUMMARY & OBJECTIVES

Summary: The West Valley Demonstration Project (WVDP) Act of 1980 (Public Law 96-368) directs the Department of Energy (DOE) to demonstrate the solidification of high-level radioactive waste (HLW). The Project is on New York State (NYS) owned property and is the site of the only commercial spent nuclear fuel reprocessing facility to operate in the United States. The Act contains five specific activities that must be completed in order to satisfy act requirements. Two of the activities have been completed (Solidification of HLW and Development of Canisters for Permanent Disposal).

The project proposed under American Recovery and Reinvestment Act (ARRA) supports the mission of DOE and the Office of Environmental Management (EM) by accelerating cleanup of excess nuclear facilities and contaminated sites. This investment will create jobs. The Western New York area has high levels of unemployment in many skilled trades that would be needed at WVDP. In addition, legacy radioactive waste will be dispositioned sooner to permanent disposal facilities, improving the long-term safety of the site and Western New York. Specific accomplishments include:

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OH-WV-0013.R1 – TRU and Solid Waste

- Accelerate the processing of 6,240 ft³ legacy Contact Handled-Transuranic (CH-TRU), Mixed and Low-Level Waste (LLW) for off site disposal.

OH-WV-0040.R1.1 – Main Plant D&D

- Accelerate Main Plant Process Building Decontamination and Decommissioning - Scope was delayed in FY08 due to funding constraints and reprioritization of work. The decommissioning of the Main Plant Process Building (MPPB) is the critical path in the schedule. To keep this scope on schedule, this funding will accelerate future decommissioning by removing vessels and process piping from the MPPB. The West Valley Demonstration Project is located on the site of the Western New York Nuclear Service Center, of which title is held by the New York State Energy Research and Development Authority therefore there are no buildings listed in FIMS. With Recovery Act funding, D&D could be completed three years ahead of schedule and the resulting footprint reduction of the MPPB is approximately 30,000 sq. ft (140,000 actual square footage of the five story structure)

OH-WV-0040.R1.2 – Other D&D

- Complete North Plateau Groundwater Plume Mitigation - Implement mitigation measures for managing the North Plateau Ground Waste Plume by installing a permeable treatment wall to limit the Sr-90 concentrations to approximately 1,000 pCi/liter at the WVDP project premises fence line and mitigate the expansion of the leading edge of the ground water contamination. Passive in-situ permeable barrier in-place to control the off-site release of Sr-90.
- Complete Tank and Vault Drying System - Install a Tank and Vault Drying System to support CORE Team recommendations for reducing risk of liquid releases associated with HLW Tank heels presently contained in tank bottoms. This work supports EIS Decision making to safely manage the tanks in the near-term (up to 30 years) and defer final decision making. Following tank drying and storage period (up to 30 years), final closure decisions are anticipated. It is anticipated that regardless of which final closure option is selected (options include – tank exhumation or closing in place), the Tank and Vault Drying System will be decommissioned and removed.

Project Definitization has been complete and all activities are within the scope of the contract, and can be completed using the existing contract vehicle West Valley Environmental Services, LLC, DE-AC3-07CC30000.

Work Scope Changes

The following scopes have been removed after definitization:

- 01-14 Building Demolition

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- Tank 8D-4 Liquid Waste Treatment
- MPPB Liquid Solidification System
- MPPB – Liquid Waste Cell and Labs (\$11M scope reduction impacts)

Other than the \$11M funding impact the additional scope reduction was done to perform more base scope.

Buy-Back Work Scope:

Based on the potential availability of funds from unused management reserve and contingency funds and from cost efficiencies in executing the planned projects, the additional candidate projects have been identified should funding become available.

West Valley currently is not anticipating any unused contingency/management reserve or cost efficiencies. We do, however, have scope ready to be performed should additional funding become available, such as:

- Ship Waste
- 01-14 Building Demolition
- Tank 8D-4 Liquid Waste Treatment
- MPPB Liquid Solidification System
- MPPB – Liquid Waste Cell and Labs

All projects will be executed by the contractors according to DOE Order 413.3A with appropriate performance measurement baselines and Department of Energy oversight. Acceptable performance on these projects will also be measured using performance metrics (e.g., cost, schedule, and scope) as established in baselines; cost and schedule performance indicators (cost performance index and schedule performance index) according to DOE-approved Earned Value Management Systems will be used as required by DOE Order 413.3A.

This Recovery Act work ties to the following DOE and EM Strategic Goals and Themes:

DOE Strategic Goal 4- Environmental Responsibility- Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.

DOE Strategic Goal 5- Management and Excellence- Enabling the Department's mission through sound management and business practices

EM Goals- To transport and dispose transuranic and low-level wastes in a safe and cost effective manner to reduce risk, decontaminate and decommission facilities to reduce long-term liabilities, remediate ground water, and fulfill commitments to reduce risk and complete cleanup across all sites for the generations to come.

Public Benefits:

The current contract work scopes support final decommissioning activities necessary to meet the requirements of the WVDP Act. Earlier completion of these activities benefits the public by meeting both long and short term decommissioning goals. Accelerated removal of stored wastes, contaminated facilities, and the remediation of ground water represent a benefit by increasing the level of protection afforded to the workers, general public and the environment of western New York. Acceleration of these work scopes also accelerates completion of DOE's mission at the WVDP and reduces overall cost of monitoring and maintaining the WVDP.

The WVDP is the biggest employer in the rural western NY area, in order for the contractor to accomplish the accelerated work scopes it is anticipated that both the prime contractor and various subcontractors will require additional staff in order to accomplish the work. As a nuclear facility, the WVDP sets high safety standards for all personnel and requires that individuals working on site complete safety, security and technical training commensurate with the work they are to perform. New employees at the WVDP, whether permanent or temporary, will receive training that is likely to assist them in any future employment efforts.

Recovery Act Project Impacts:

The work at the West Valley Demonstration Project will accelerate the clean-up of the former spent nuclear fuel reprocessing facility and the associated footprint reduction. This investment of additional funding in the WVDP could complete work that is required under the Record of Decision for the Decommissioning Environmental Impact Statement three to four years ahead of schedule resulting in a footprint reduction of 31,350 sq. ft., with a potential cost savings of \$51 million.

II. COST & SCHEDULE

Budget:

Table 1: Budget Implementation Monthly & Yearly Obligations (actuals for April 2009 through May 2010 and projected for Jun 2010 through Jun 2011) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with an obligations table.

Table 2. Budget Implementation Actual and Planned Monthly Expenditures(actual costs for Apr 2009 through Feb 2010 and projected costs for Mar 2010 through Sept 2011 and then, if applicable, projected annual expenditure in FY2012) (\$M)

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The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with a costs table.

Funds Returned and Offsetting Collections

West Valley Demonstration Project has returned \$11M as a result of carrying out other New York Recovery Act projects.

Table 3: Funds Returned and Offsetting Collections (\$11M)

	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Provide description and amounts for Funds Returned and Offsetting Collections	N/A	(\$11M)	N/A	N/A	N/A	N/A	N/A

Note: Scope reduction as a result of the \$11M reduction is described above.

Indirect Costs

The estimated percentage of Recovery Act Project costs which will be indirect is approximately 25%. The work will be performed by the existing contractor utilizing an approved indirect rate structure. The estimated overhead rates are: FY 2009 48.4%, FY 2010 45.94%, and FY 2011 48.4%. All contractor indirect rates are subject to annual audit review by the Defense Contract Audit Agency (DCAA) and require final approval by the Contracting Officer.

Definitions

DIRECT: Represents cost categories that are directly tied to a specific project or end item.

INDIRECT: Represents costs allocable to projects that are not direct costs. Indirect costs should only be reported by sit and facility operating contractors (i.e., Management & Operating contractors)

Changes to Baseline Budget

Table 4: Changes to Baseline Budgets (\$M) [revise only if project changes affect this table in the initial POP]

Not Applicable

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Milestones:

Milestones for OH-WV-0013.R1

Milestone Date (ARRA Baseline Date)	OH-WV-0013.R1 – TRU and Solid Waste
12/30/2010	Accelerate Processing Legacy CH-TRU, MLLW and LLW for Disposal

Milestones for OH-WV-0040.R1.1

Milestone Date (ARRA Baseline Date)	OH-WV-0040.R1.1 – Main Plant D&D
01/31/2010	GOA Phase I ACM Removal Complete
02/28/2010	ULO-ACM Removal Complete
03/31/2010	Control Room - Phase II ACM Removal Begins
04/30/2010	Group 1 Cold & Dark Complete
06/30/2010	Off-Gas Cell - Establish Access
07/31/2010	Group 2 Cold & Dark Completed
09/30/2010	UWA ACM Removal Complete
10/31/2010	Complete Outdoor ACM Removal
11/30/2010	Group 5 Cold & Dark Complete
12/31/2010	GOA - Cold & Dark
01/31/2011	Off-Gas Cell Decontamination Complete
03/31/2011	Pull & Disposition VEC Filters
04/30/2011	E/WMOA ACM Removed
05/31/2011	MPPB Stairway ACM Removed

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06/30/2011	Main Plant Processing Building Acceleration
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Milestones for OH-WV-0040.R1.2

Milestone Date (ARRA Baseline Date)	OH-WV-0040.R1.2 – Other D&D
01/31/2010	Final Design T&VDS Submitted to DOE
02/28/2010	Complete Final Design of T&VDS
03/31/2010	Start installation of Drying System
12/30/2010	North Plateau Groundwater Plume Mitigation

Note: Milestones will be updated after final contract negotiations.

NEPA Compliance

Main Plant decontamination and waste sorting work was conducted under previously existing NEPA analyses. Additional NEPA documentation was prepared to support the remaining ARRA work scope, as necessary. Specifically, such coverage was provided through a combination of the Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center (DOE/EIS-0226) (Final Decommissioning EIS) and applicable categorical exclusions. A Record of Decision for the Final Decommissioning EIS was issued on April 20, 2010, allowing all work to proceed that relied upon that document for coverage.

Project Management

Table 5: Delivery Schedule for Capital Asset Projects [Revise if changed since the initial POP. Sites should identify in this table the actual dates for the EIRs, IPRs, and PRs; the dates of the EMAAB and pre-EMAAB meetings; and the dates of the Critical Decisions.]

Program/OECM Milestone	Delivery (End) Date	Comments
Develop capital asset projects	8/2009	

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Integrated Project List		
Develop Parametric Performance Baseline (Individual Projects)	9/2009	
If < \$100 M Perform IPR, > \$100 M Perform EIR (Individual Projects)	10/2009	Recommendation letter to approve was sent 11/2009
Approve Performance Baseline		Awaiting official approval
Approve Start of Construction	NA	
Approve Project Completion		

NOTES: WVES currently has \$4.2M in MR to cover the risks identified in their Risk Management Plan.

III. PERFORMANCE

Performance Measures

Table 6a: Overall ARRA Project Performance Measure and Targets

[Revise text in table 6 to reflect the single PM identified to represent the site in PMM. The PM's used in IPABS will be described in new tables 6b, 6c, ... for each level 3 project]

Recovery Act Project Identification Code	2002180
Linkage To S-1 Priorities	Economic Prosperity National Security and Legacy
Linkage to Current Program Goal (if applicable)	Complete Legacy Environmental Clean-Up
ARRA Overall Performance Measure	Complete all ARRA Scope
First Year Performance Target (2 nd half FY 2009)	
Q3 - Project-Level Quarterly Performance Milestone(s)	Initiate hiring for additional operators and engineers MPPB decontamination acceleration begins
Q4 - Project-Level Quarterly Performance Milestone(s)	Scope determination/Contract modification Initiate Liquid Solidification System Design

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Second Year Performance Target (FY 2010)	
Q1 - Project-Level Quarterly Performance Milestone(s)	Process Legacy CH-TRU Waste
Q2 - Project-Level Quarterly Performance Milestone(s)	Process Legacy CH-TRU Waste
Q3 - Project-Level Quarterly Performance Milestone(s)	Process Legacy CH-TRU Waste
Q4 - Project-Level Quarterly Performance Milestone(s)	Process Legacy CH-TRU Waste
Third Year Performance Target (FY 2011)	
Q1 - Project-Level Quarterly Performance Milestone(s)	Process of Legacy CH-TRU Waste Install one Groundwater System Install Groundwater Wells
Q2 - Project-Level Quarterly Performance Milestone(s)	None
Q3 - Project-Level Quarterly Performance Milestone(s)	Facility Square Footage Demolition Ready
Q4 - Project-Level Quarterly Performance Milestone(s)	None

[Note: Performance Measures will be updated after final contract negotiations.]

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Table 6b. Performance Measures and Targets

Performance Measure for OH-WV-0013.R1												
	FY 2009 Q3 Target	FY 2009 Q4 Target	FY 2010 Q1 Target	FY 2010 Q2 Target	FY 2010 Q3 Target	FY 2010 Q4 Target	FY 2011 Q1 Target	FY 2011 Q2 Target	FY 2011 Q3 Target	FY 2011 Q4 Target	FY 2012 Yearly Target	Total ARRA Target
Process Legacy CH-TRU Waste	0	0	15	45	45	45	31	0	0	0	0	181M ³

Table 6c. Detailed ARRA-Specific Project Performance Measures and Targets

Performance Measure for OH-WV-0040.R1.1												
	FY 2009 Q3 Target	FY 2009 Q4 Target	FY 2010 Q1 Target	FY 2010 Q2 Target	FY 2010 Q3 Target	FY 2010 Q4 Target	FY 2011 Q1 Target	FY 2011 Q2 Target	FY 2011 Q3 Target	FY 2011 Q4 Target	FY 2012 Yearly Target	Total ARRA Target
Facility Square Footage Demolition Ready	0	0	0	0	0	0	0	0	28,900	0	0	28,900 ft ³

Performance Measure for OH-WV-0040.R1.2												
	FY 2009 Q3 Target	FY 2009 Q4 Target	FY 2010 Q1 Target	FY 2010 Q2 Target	FY 2010 Q3 Target	FY 2010 Q4 Target	FY 2011 Q1 Target	FY 2011 Q2 Target	FY 2011 Q3 Target	FY 2011 Q4 Target	FY 2012 Yearly Target	Total ARRA Target
D&D Debris & Remediated Soil Disposed	0	0	0	0	624	626	0	0	0	0	0	1250ft ³
Install Groundwater System	0	0	0	0	0	0	1	0	0	0	0	1 system
Groundwater Wells Installed	0	0	0	0	0	0	18	0	0	0	0	18 wells

NOTE: Describe how current PMM program goals are being advanced and/or accelerated through Recovery Act funding. These active targets and measures should be updated to account for additional spending. These metrics must explicitly define in a clear, concise manner the point at which Recovery Act funding will potentially improve the overall outcome of the metric. Where practical, also identify impacts to PART performance.

IV. MANAGEMENT

[No revisions to Table 8 and following text are expected. Revise Tables 9 and 10 to reflect any changes since the initial POP was submitted.]

Secretarial-level Items:

Table 8: Secretary's Priorities

Secretary's Priorities	Project Impacts (Qualitative)	Project Impacts (Quantitative)
Science and Discovery		
Clean, Secure Energy		
Economic Prosperity	The Western New York economy has been severely strained over the past few decades. The economy of Western New York is primarily driven by manufacturing jobs and has been impacted by the loss of jobs in the steel industry and automotive industry. Many of the skills needed by the WVDP are readily available	This Recovery Act funding will create and/or retain many new jobs in Western New York.
National Security and Legacy	Accelerating the removal and proper disposal of hazardous and radiological material reduces the risk of release into the environment	The Recovery Act funding will accomplish the following: -Process Approx. 181 m ³ of Legacy Waste
Climate Change		

Collaboration and Coordination:

The DOE-WVDP will continue its long history of working collaboratively with other sites and other agencies. Specifically for Recovery Act activities, DOE-WVDP will work closely with the U.S. Environmental Protection Agency and the U.S. Nuclear Regulatory Commission on accelerating the clean-up. Continuing efforts to carry out the cooperative agreement with NYSERDA and Community Outreach programs will continue.

Federal Infrastructure Investments:

N/A

Line Management:

Project Management

Recovery Act activities will be tracked separately and independently from base program activities. Recovery Act activities will be discussed weekly as part of the Projects Weekly Project Status Meeting. Recovery Act activities will also be reported separately in the Monthly Progress Report. The WVDP Risk Management Plan and the West Valley Environmental Services (WVES) Risk Management Plan has been revised to

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include Recovery Act Risk Sheets. The risks will be discussed monthly at the Monthly Risk Management Plan meetings.

Transparency

DOE-WVDP will establish a separate webpage on our internet site (www.wv.doe.gov) that will provide status of Recovery Act activities. This website will have a link to the Environmental Management website at www.em.doe.gov/emrecovery. DOE-WVDP will provide status of Recovery Act activities during our monthly Citizen Task Force Meeting and our Quarterly Project Meetings. DOE-WVDP and WVES will also provide information on Recovery Act activities in our public newsletter, *WVDP Insights*.

Performance

The DOE-WVDP Director and Deputy Director's Performance Plans were revised to include performance on Recovery Act activities.

Needs from Staff Offices:

List and describe project needs that must be met by DOE staff offices. Please be as specific as possible. This information will be used to coordinate support staffing, funding, and needs

1) Human Capital

DOE-WVDP intends to increase the DOE staff at WVDP by six positions to support project work for Recovery Act activities. DOE-WVDP will use a staff augmentation contract to fill three position required to perform Recovery Act work. These positions include safety documentation development and review, environmental compliance, and administrative support. In addition, DOE-WVDP plans to use the Environmental Management Professional Development Corps (EMPDC) to train two individuals in safety and health and environmental protection. The EMPDC positions will eventually replace the staff augmentation contractors once they are on-board and trained. Finally, DOE-WVDP has requested an on-site contracted Project Control specialist be provided from PT&C. DOE-WVDP has been pleased with our arrangements with EMCBC to provide on-site support. Currently, DOE-WVDP has nine EMCBC employees at WVDP augmenting our federal staff. This approach provides tremendous flexibility for both DOE-WVDP and EMCBC.

DOE-WVDP does not intend to use term employees at this time. We have established an excellent relationship with the U.S. Army Corps of Engineers to provide services to the site utilizing IEWO's. We will continue with this arrangement.

DOE-WVDP does not anticipate utilizing hiring or retention incentives at this time.

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Table 9: Information on Hiring Under the Recovery Act

# & Type of Positions (Title, Series and Grade)	Location (HQ or Field – w/location)	Federal or Contractor	Timeframe (1-6mos; 6+mos; other; specify date needed if possible)
Environmental Engineer	West Valley	Contractor	May 09 – Sept 11
Administrative Support	West Valley	Contractor	May 09 – Sept 11
Recovery Act Program Analyst	West Valley	Contractor	May 09 – Sept 11
Environmental Management Professional Development Corps (Two)	West Valley	Federal	Oct 09 – Sept 11
Health & Safety Engineer	West Valley	Contractor	May 09 – Sept 11

2) Procurement

Discuss procurement needs, status, barriers, and plans. Each major procurement effort must be identified independently. Include the following information:

Table 10: Procurement Plans

Activity	Type	New/Exist (N/E)	Changes (E), Needs (N)	Status	Expected Complete	Issues (Y/N)
Accelerate D&D MPPB	Contract	E	E	Open	6/30/2011	N
Accelerate Tank Vault Drying system	Contract	E	E	Open	6/30/2011	N
Accelerate MW, LLW, CH-TRU processing shipment	Contract	E	E	Open	6/30/2011	N

NOTES: If activity type is “Other,” describe the type of procurement vehicle. Also describe any outstanding issues that need to be addressed. [revise this description only if project changes affect the text in the initial POP]